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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/676,640 | 10/01/2003 | David W. Blodgett | 1892-SPL | 7856 |

7590 03/24/2004

Albert J. Fasulo, II., Office of Patent Counsel
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| EXAMINER | |
|---|---|
| FAYYAZ, NASHMIYA SAQIB | |
| **ART UNIT** | **PAPER NUMBER** |
| 2856 | |

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/676,640 | BLODGETT, DAVID W. | |
| | Examiner | Art Unit | |
| | Nashmiya S. Fayyaz | 2856 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over SU-178114 Arseneva et al.

As to claims 1 and 6, Arseneva et al disclose a method and device for determination of technological parameters of wood by applying electromagnetic vibrations via a converter 9 to a test wood at a resonance frequency and then a Q factor is determined which is then used to determine technical parameters of the wood, see abstract translation. It is noted that Arseneva et al. fail to disclose usage on "tree" wood or comparison with a predetermined relationship. However, it is old and well-known that wood is obtained from trees such that the usage of tree wood for testing of the parameters in Arseneva et al. would have been obvious to one of ordinary skill in the art at the time of the invention since it is known wood is obtained from trees. Further, establishing a comparison would have been obvious as well to one of ordinary skill in the art at the time of invention since Arseneva et al include a comparator 11 from which the technical parameters are established.

2. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunlop U.S. Patent #4,399,701.

As to claims 1-22, Dunlop discloses a method and apparatus for detecting degradation in wood by applying acoustic vibration waves via transducer 12 inserted in

slot 13 to wooden pole 10, then transducer 16 measures resonance's of the pole and the quality of the pole is determined by detecting the resonance frequencies and the bandwidths of the frequencies at which they occur, i.e. the "quality factor" is used to establish the quality of the pole, see col. 1, lines 24 et seq. Further, it is noted that Dunlop fails to disclose usage of the apparatus/method on a "tree", per se. However, it is old and well-known that testing of "wood articles" as disclosed by Dunlop on lines 21-24 of col. 1 are known to include trees (timber) as well as application wood such as poles or piers etc. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have applied the teachings of Dunlop to any type of wood including trees since the same type of rot or deterioration would be found in all types of wood.

3. Claims 2-5, and 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunlop as applied to claims 1 and 6 above, and further in view of Shaw U.S. Patent #4,059,988.

As to claims 2-3 and 8-14 note that the transducers do penetrate the wood, see figure 1.

However, prongs are not disclosed but rather it is indicated that "slots are cut". Usage of prongs to cut into the wood is a known expediency as depicted in Shaw by spikes 7 with transducer 8 that their inclusion is considered to have been obvious to one of ordinary skill in the art at the time of invention in order to avoid 2 steps of cutting a slot and then inserting a transducer. As to claims 4-5 selection of the pike material is considered to have been a matter of design choice of known materials obvious to one of

ordinary skill in the art at the time of invention. As to claims 6-7 see 15-16 col. 1, lines 24-37.

Also, as to claims 8 and 18 note in col. 2, lines 1-3 the disclosure of using a single tranducer. As to claims 19 and 20 note col. 2. lines 4-7 and variable frequency voltage generator 14. As to claim 21 and 22 note transducer 16 which is measuring vibration. Accelerometers are known for vibration transducers. Therefore, it would have been a matter of design choice to employ an accelerometer as the disclosed vibration transducer to one of ordinary skill in the art at the time of the invention to measure the vibratory response.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, on line 3, "the tree" and on line 9, 'the observed quality factor" lack clear antecedent basis. In claim 11, the claim body lacks any reference do probing a tree as in the preamble.

5. Any inquiry concerning this communication should be directed to Nashmiya S Fayyaz at telephone number (571)272-2192.

3/19/04

HEZRON WILLIAMS
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